

香月繁孝*: 奄美大島産寄生菌類**

Shigetaka KATSUKI*: Notes on some parasitic fungi of
the Amami Islands, Japan**

During the autumn of 1954, the writer visited the Amami Islands for the purpose of collecting fungi, the number collected totalling about four hundred. Among these, five species of *Cercospora* namely, *C. arisaemae* Tai, *C. commelinicola* Chupp, *C. depazeoides* (Desm.) Saccardo, *C. dichondrae* Katsuki and *C. drymariae* Katsuki were reviewed by the author (1), and twenty species of rust fungi were described by Dr. Hiratsuka et al. (2).

All the species noted in this paper have not been previously observed in Japan or else even before recorded world-wide. The writer wishes to express his great appreciation for valuable advice given by Dr. C. D. Chupp, Cornell University, Dr. E. S. Luttrell, Georgia Agricultural Experiment Station, Dr. J. A. Stevenson, United State Department of Agriculture and Dr. W. Yamamoto, Hyogo University of Agriculture.

Enumeration of Species

1. **Asterina sponiae** Raciborski, Bull. Inst. Bot. Buitenzorg **3**: 34, 1900.

Hab. On *Trema orientalis* L. (Kiri-enoki), Koniya, Oct. 5, 1954, No. 740.
Distribution: Philippines, Java and Formosa.

2. **Amazonia peregrina** (Sydow) Sydow, Ann. Myc. **15**: 238, 1917.—*Meliola peregrina* Syd. Philipp. Jour. Sci. C. Bot. **8**: 479, 1913.

Hab. On *Maesa perlarius* Merr. (Shima-izusenryo), Nase city, Oct. 4, 1954, No. 724. Distribution: Philippines and Formosa.

3. **Phyllachora minuta** P. Henn., Hedw. **41**: 143, 1902; Sacc., Syll. Fung. **17**: 832, 1905.

Hab. On *Hibiscus tiliaceus* L. (Ohamabo), Nase city, Oct. 3, 1954, No. 670.
Distribution: Hawaii, Philippines and Formosa.

4. **Guignardia trichosanthis** Katsuki sp. nov. (Fig. 1)

Maculis amphigenis in foliis, indefinitis, sparsis dein confluentibus, 3-15 mm diametris, demum aridis, fragilibus, textus scindente, brunneis et concoloribus supra

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et infra; peritheciis amphigenis membranaceis vel in aetate carbonaceis, innatio-erumpentibus, sphaericis, $160\text{--}190\mu$, paraphysibus presentibus, hyalinis; asci cylindraceis vel clavatis, ad apicem rotundatum, $45\text{--}62\mu$ longis, $16\text{--}20\mu$ latis, octosporis; ascosporis hyalinis, non-septatis, obovatis vel clavatis $11\text{--}16 \times 6\text{--}9\mu$.

Hab. On *Trichosanthes cucumeroides* Maxim. (Karasuuri) (Cucurbitaceae), Nase city, Amami Islands, Oct. 3, 1954, S. Katsuki, No. 671-Type.

5. **Macrophoma sycophila** (Mass.) Sacc. et D. Sacc. var. **corticola** Trav. et Migliardi, Fl. Myc. Venozia p. 12, 1911; Sacc. et Trotter, Syll. Fung. 22: 911, 1913.

Hab. On *Ficus superba* Miq. (Ako), Kikai Island, Oct. 9, 1954, No. 1012. Distribution: Italy.

The present species is easily distinguished from *Macrophoma sycophila* (Mass.) Sacc. et D. Sacc. (in Kew Bull. 1091, p. 156; Syll. Fung. 18: 273, 1906) and *M. fici* d'Alm. et da Cam. (Rev. Agronom. 4: 61, 1906; Syll. Fung. 22: 911, 1913) by the shapes of pycnidia and pycnospores.

The morphological characters of this fungus are as follows:

Infected leaves show discoloration, greyish white or pale brown; pycnidia amphigenous but mostly epiphyllous, scattered or grouped, black, erumpent, fragile, parenchymatous, globose, $80\text{--}96\mu$ diam., $48\text{--}80\mu$ high; pycnospores ellipsoid, non-septate, hyaline, $15\text{--}17 \times 5\text{--}6\mu$.

6. **Septoria veronicicola** Karsten, Sym. Myc. 21: 104; Sacc., Syll. Fung. 10: 378, 1892.

Hab. On *Veronica officinalis* L. (Kumatsuzura). Distribution: Finland.

Several species of *Septoria* are reported by a number of authors as found on this genus of *Veronica*, viz. *Septoria veronicae* Desm. (Saccardo 1884), *S. exotica* Speg. (Saccardo 1884), *S. veronicae* Karsten (Saccardo 1892), *S. exotica* Speg. var. *andersoni* F. Tassi (Saccardo 1899), *S. veronicae* Desm var. *cotyledonicola* C. Mass. (Saccardo and Trotter 1913) and *S. triphylli* Hollos (Saccardo and Trotter 1913).

The occurrence of *S. veronicae* Karsten has been reported from Finland on *V. officinalis* but not yet from Japan. The characteristics correspond well to those

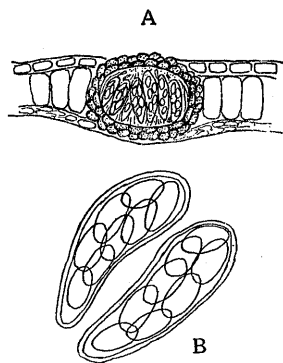


Fig. 1. *Guignardia trichosanthis* Katsuki a. Perithecium ($\times 100$) b. Asci and ascospores ($\times 425$)

of *S. veronicicola*. The results of the present studies are as follows:

Spots roundish, irregular, scattered, brownish; pycnidia epiphyllous, scattered, membranous, dark brown, depressed globose, $80-90 \times 70-80 \mu$; spores filiform, straight or somewhat curved, continuous, hyaline, $13-33 \times 2.0-2.5 \mu$.

7. **Cladosporium lactucae** Sawada, Formosa Agr. Res. Inst. Rept. **85**: 92, 1943.

Hab. On *Lactuca indica* L. (Akino-nogeshi), Koniya, Oct. 5, 1954, No. 733; Mikata-mura, Oct. 6, 1954, No. 885. Distribution: Formosa.

8. **Cercospora alocasiae** Sawada, Formosa Agr. Rev. **38**: 693, 1942; Formosa Agr. Res. Inst. Rept. **85**: 98, 1943.

Hab. On *Alocasia macrorrhiza* Schott (Kuwazuimo), Kikai Island, Oct. 9, 1954, No. 1014. Distribution: Formosa.

9. **Cercospora blumeae** de Thuemen, Revue Myc. **2**: 38, 1880; Chupp, Monog. Genus Cercosporae p. 124-125, 1953. *C. blumeae-lacerae* Sawada, Formosa Agr. Rev. **38**: 694, 1942.

Hab. On *Blumea sinuata* Mig. (Sakeba-kozorina), Koniya, Oct. 5, 1954, No. 744. Distribution: Ceylon and Formosa.

Blumea sinuata is a new host plant for this fungus.

10. **Cercospora conyzae** Sawada, Formosa Agr. Res. Inst. Rept. **86**: 168, 1943.

Hab. On *Conyza aegyptiaca* Ait. (Kikuba-izuhahako), Koniya, Oct. 5, 1954, No. 747. Distribution: Formosa.

Conyza aegyptiaca Ait. seems to be a new host plant for this fungus.

11. **Cercospora fusimaculans** Atkinson, Jour. Elisha, Mitchell Sci. **8**: 50, 1892 — *C. panici* Davis, Wisc. Acad. Trans. **19**: 714, 1919. — *C. panici-miliacei* Sawada, Formosa Agr. Res. Inst. Rept. **51**: 131, 1931. — *Cercosporina panici* (Davis) Sacc. Syll. Fung. **25**: 904, 1931.

Hab. On *Oplismenus undulatifolius* Roem. et Schult. (Chizimi-zasa), Kikai Island, Oct. 9, 1954, No. 999. Distribution: North America, Central America, South America, Africa, India and Formosa.

12. **Cercospora hyperici** Tehon et Daniels, Mycologia **19**: 127, 1927; Chupp, Monogr. p. 260, 1953.

Hab. On *Hypericum ericum* Thunb. (Otogiriso), Mikata-mura, Oct. 6, 1954, No. 874. Distribution: North America.

13. **Pseudocercospora miscanthi** Katsuki sp. nov. (Fig. 2)

Maculis in foliis, amphigenis plerumque hypophyllis, linearibus vel irregularibus,

maximis 5×13 mm, brunneis cum purpureo brunneis; caespitulis hypophyllis; stromatibus exique vel cellis paucis tenuis $20-40\mu$ diam., atro-brunneis: conidiophoris cylindraccis, brunneis, rectis vel nonnihil curvatis, 2-5 septatis, $29-95 \times 4.6-6.4\mu$; conidiis pallide olivaceis vel hyalinis, obclavatis, ad bases obtusis, ad apice acutis, $24-40 \times 5.0-6.5\mu$.

Hab. On *Miscanthus sinensis* Anders. (Susuki) (Gramineae), Mikata-mura, Amami Island, Oct. 6, 1954, S. Katsuki, No. 859-Type.

Sawada (Formosa Agric. Res. Inst. Rept. 87: 83, 1944) reported *Cercospora miscanthi* Sawada, occurring on *Miscanthus japonicus* And. from Formosa. The fungus under consideration is distinct from it in the morphology and symptomatology.

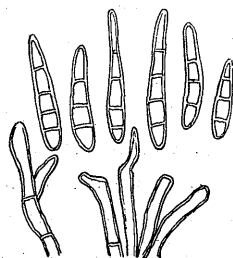


Fig. 2. *Pseudocercospora miscanthi* Katsuki Conidiophores and conidia ($\times 425$)

14. ***Pseudocercospora mussaendae* Katsuki sp. nov. (Fig. 3)**

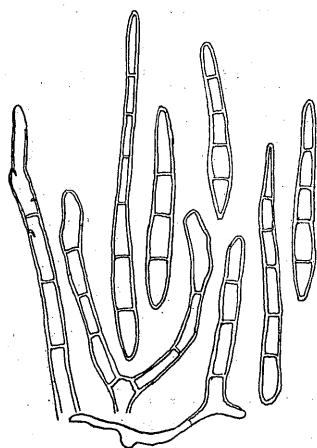


Fig. 3. *Pseudocercospora mussaendae* Katsuki Conidiophores and conidia ($\times 425$)

Maculis hypophyllis, irregularibus, primo nervis limitatis, olivaceis vel cinereis cum atro-brunneis, 3-5 mm in spatio vel aliquando in areas magnas confluentibus, superne superficie minus distinctis, nonnihil luteo-brunneis; caespitulis plerumque hypophyllis, effusis, stromatibus egentibus, fasciculis non-densis; conidiophoris uniformiter mediocriter brunneis, cica-tricibus sporatum parvis, 1 vel 2, rectis vel geniculatis, parce ramosis, 2-7 septatis, $70-112 \times 5.0-6.4\mu$; conidiis irregulariter cylindraccis vel obclavato-cylindraccis, dilute olivaceis vel hyalinis, 0-6 septatis, ad bases obconico-truncatis vel globosis, ad apices subacutis vel sub-obtusis, $41-124.6 \times 6.1-6.8\mu$.

Hab. On *Mussaenda parviflora* Mig. (Konronka) (Rubiaceae), Koniya, Amami Is-

lands, Oct. 5, 1954, S. Katsuki, No. 764-Type.

Literature References

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